

Information System Components of Information Operations

by Major Arthur N. Tulak, US Army, and
Major James E. Hutton, US Army

This article discusses Army information operations (IO) doctrine principles and how to apply them in peace operations. Doctrinal concepts are applied to the general category of military operations other than war (MOOTW) in general, and peace support operations (PSO) in specific. Please note that this article is not doctrine, but rather an analysis of doctrine as it is being interpreted in the field.

While IO's component parts have been exercised in combat operations and MOOTW, Army IO doctrine is still relatively new—US Army Field Manual (FM) 100-6, Information Operations, was published in August 1996. Because the Army's purpose is to fight and win the nation's wars, IO doctrine must be focused on combat operations. However, field units performing contingency operations have had to apply IO in MOOTW environments with varying degrees of success. This article will capture some MOOTW lessons learned from Haiti, Bosnia and the Middle East so unit leaders can apply these lessons to their own contingency planning.

The most frequent noncombat missions requiring IO have been peacekeeping (PK) and peace enforcement (PE). Currently, there is no doctrinal source focused on implementing IO in PSO. This article discusses available doctrinal sources for Army IO and its component disciplines, as well as an active collection of observations from Task Force (TF) Eagle, and Operations Joint Endeavor (OJE), Joint Guard (OJG) and Joint Forge (OJF) in Bosnia-Herzegovina to provide commanders and their staffs a comprehensive document that shows how IO may be applied in PSO. The tactics, techniques and procedures (TTPs) presented here provide a starting point for mission analysis and course of action (COA) development for units tasked to conduct IO. If your unit has identified lessons learned concerning IO, or IO TTPs that work, please share them by contacting the authors at the Center for Army Lessons

Learned (CALL) at DSN 552-2255/3035, Fax DSN 552-9564/9583 or commercial (913) 684-9564/9583. Their E-mail address is call@leavenh1.army.mil or <http://call.army.mil/call.html>. Be sure to include your phone number and complete address when contacting them.—Editor

“IN THEIR SIMPLEST FORM, [information operations] are the activities that gain information and knowledge and improve friendly execution of operations while denying an adversary similar capabilities by whatever means possible.”¹ Army IO doctrine is an undeveloped area, with TTPs still emerging and evolving during field contingency operations. FM 100-6 emphasizes repeatedly that IO take place across the operational continuum. However, Army doctrine focuses on combat operations, and leaders faced with the challenge of employing IO in MOOTW find themselves having to interpret doctrine and apply a different set of tasks.² Throughout NATO peace operations in Bosnia, US forces in TF Eagle have had to use a “trial and error” approach to IO planning.³ This article is built on content analysis of open sources and from observations collected during PSO on the disciplines now encompassed by IO doctrine.

The IO concept is a new approach to conducting military operations that focus on controlling and exploiting information to support operations and achieve a desired end state. IO synchronize several information-based components, such as operations security (OPSEC), military deception, electronic warfare (EW), psychological operations (PSYOP), civil affairs (CA) and public affairs (PA), which were previously “stove-piped” and independent of one another. By bringing all of these information-based operations under one doctrinal framework, the Army ensures that all IO are synchronized and mutually reinforcing, achieving synergy and unity of effort.

Operations

The new IO doctrine applies an organizing architecture to the many activities that focus on using information and information systems to support military operations, and it details respective interrelationships. FM 100-6 further defines IO as “continuous military operations within the MIE [military information environment] that enable, enhance and protect the friendly force’s ability to collect, process and act on information to achieve an advantage across the full range of military operations. IO include interacting with the global information environment [GIE] and exploiting or denying an adversary’s information and decision capabilities.”⁴ The MIE is the military portion of the GIE which consists of “information systems [INFOSYS] and organizations—friendly and adversary, military and nonmilitary—that support, enable or significantly influence a specific military operation.”⁵

C²W. IO comprises three interrelated components: operations; relevant information and intelligence (RII); and INFOSYS. The Army uses three operations to conduct IO: command and control warfare (C²W), CA and PA. Grouping C²W, CA and PA together as specific IO provides a framework to promote synergy and facilitates planning and execution. All military activities conducted as part of these operations are classified within the two disciplines of C²-attack and C²-protect. *C²-attack* is offensive C²W which is intended to gain control of the adversary’s C² information flow and situational understanding. Effective C²-attack allows friendly forces to either destroy, degrade, neutralize, influence or exploit an adversary’s C² functions. Successful *C²-protect* operations ensure effective friendly-force C² “by negating or turning to a friendly advantage the adversary’s efforts to influence, degrade or destroy friendly C² systems.”⁶

Historically the Army planned and executed the various C²W elements independently of one another.⁷ Successful C²W operations support the Army objective of achieving information superiority in any operational environment. Current IO doctrine combines C²W’s five elements into one integrated approach that includes OPSEC, military deception, EW, PSYOP and physical destruction.

PA. PA provide information about ongoing operations to soldiers and the American public. PA enable commanders to effectively work with the media and pull information that is of value to them and their forces. PA facilitate media on the battlefield to share the unit’s operation with the public and help keep soldiers informed through the command information program, which explains the operation’s purpose and informs soldiers and leaders of their expected roles.

PSO PA is a means to counter adversary propaganda and to overcome censorship. In peace operations, where one or more of the former warring factions (FWF) may oppose PSO force objectives, adversaries will exercise censorship and propaganda programs aimed at the local populace, using the media and other neutral players, such as nongovernment organizations (NGOs) and private volunteer organizations (PVOs), as the medium to transmit disinformation.⁸ In MOOTW, adversaries can also be expected to use an old Soviet technique to “plant” disinformation in the local or international media and then pick up the story to support its propaganda efforts after it has been reported, repeating it in the media it controls as a credible message obtained from a third party source.⁹ By closely monitoring the various media, PA remains ready to defeat enemy propaganda by whatever medium it is disseminated through. The target of such disinformation or propaganda may be directed at weakening coalition force unity of effort, similar to the Iraqis’ divisive PSYOP campaign during Operation *Desert Shield/Storm*.

Accordingly, PA missions during PSO should:

- Provide the commander with assessments on media relations and media effects on operations.
- Control media access to certain parts of military operations.
- Prepare information/news releases.
- Communicate directly with the local media through press conferences to provide the PSO’s official position on operations.
- Counter adversary propaganda or disinformation.
- Communicate command information to the deployed force in-theater, to families at home station and to the American people.
- Provide focused PA coverage as directed.
- Coordinate with CA and PSYOP cells to ensure consistency of public and command information, civil-military information and PSYOP messages without any compromise to PA credibility.
- Make visual products and information available to the media to tell the Army story.¹⁰
- Schedule and coordinate media events for the commander and other subject-matter experts.

CA. CA operations secure local acceptance of US forces by establishing the relationship between the military force, local civilian authorities and interested international organizations, NGOs and PVOs.¹¹ Successful CA operations support IO through their daily interface with key organizations and individuals operating in the MIE.

CA performs an important liaison function between the military force, local civil authorities, international organizations, NGOs and PVOs established in the area of operations (AO). CA also pro-

vides the commander a means of shaping his battlespace by synchronizing their actions with those of the military force. CA accomplishes three key tasks in peace operations:

- Provides liaison between the military force, local civil authorities and engaged international organizations, NGOs and PVOs in the AO.
- Builds and maintains local and regional public support for the military force and its objectives.
- Provides information to the military force by interacting with international, regional and local civilian organizations and civil government.

Once the military force has created and sustained the necessary preconditions for effective civil governance, CA supports the successful transition from military operations to a self-sustaining peace maintained by those civil organizations and agencies who will remain active long after PSO forces depart.

Additionally, CA builds public support for the military force and its objectives, which affects the legitimacy of supporting political institutions and the political underpinnings of the peace operation itself.¹² By building public support for the military force, CA reduces the threat from acts of civil disobedience and civil disturbance and enhances force protection. Civil-military operators publicize CA activities to leverage their effects beyond the immediate audience. By exploiting existing local media through press conferences, talk shows and local newspapers, and by leveraging their participation in civilian governmental leader forums, CA fosters support for—or at least a tolerance of—the PSO force and its mandate.¹³ In *OJE*, *OJG* and *OJF*, CA units were tasked to publicize their activities in the local and international press, as well as to provide information to the local population.

By providing information to the civilian leadership and population, CA personnel must reinforce established information campaign themes to ensure consistency and unity of effort throughout all axes of the information campaign. More important, CA activities influence and control indigenous infrastructure and interface with key organizations and individuals.¹⁴ CA, PSYOP and PA elements are able to use the same communication media with essentially the same messages but to different audiences. CA and PSYOP address local populations, while PA personnel address friendly forces and national and international news media. PA, PSYOP and CA all communicate information to critical audiences to influence their understanding and perception of the operation. Information campaign planning and execution across the three disciplines “must be synchronized, and the messages they communicate must be truthful and mutually supportive to ensure that credibility is not undermined.”¹⁵ A

coordinated MOOTW IO plan incorporating both PA and CA is critical for building legitimacy for host nation, coalition, US and world support.

From an operations standpoint, CA provides another collection means for the commander’s critical information requirements (CCIR) through liaison and interaction with local civil authorities and international organizations, NGOs and PVOs in the

Grouping C²W, CA and PA together as specific IO provides a framework to promote synergy and facilitates planning and execution.

All military activities conducted as part of these operations are classified within the two disciplines: C²-attack is offensive C²W which is intended to gain control of the adversary’s C² information flow and situational understanding.

... Successful C²-protect operations ensure effective friendly-force C² “by negating or turning to a friendly advantage the adversary’s efforts to influence, degrade or destroy friendly C² systems.”

AO. In PSO, the CCIR are often obtained through other than conventional information-gathering entities. CA information-gathering activities in peace operations must encompass the complete spectrum of cultural, social, political and economic issues within the AO to provide the most accurate and up to date human intelligence (HUMINT).¹⁶ However, in conducting information-gathering activities, CA personnel must avoid appearing to be intelligence agents, or risk degradation of their primary mission. During *OJE*, *OJG* and *OJF*, CA personnel enjoyed greater freedom of movement because they were exempted from the “four-vehicle convoy rule” and could travel in two-vehicle convoys. This facilitated their ability to both gather and disseminate information.

RII. RII is defined as “Information drawn from the [MIE] that significantly impacts, contributes to, or is related to the execution of the operational mission at hand. . . . [RII] serves as the currency of IO.”¹⁷ Intelligence is “the critical sub-element of relevant information that focuses primarily upon foreign environments and the adversary. In support of friendly operations, intelligence helps produce a common, current and relevant picture of the battlespace that reduces uncertainty and shortens the commander’s decision-making process.”¹⁸ Situational understanding, built from RII shared throughout the force, is referred to as the relevant common picture (RCP). “Relevant information drawn from the MIE supports the creation of

situational [understanding] that contributes directly to effective C² during all stages of the decision and execution cycle.”¹⁹ The CCIR and priority intelligence requirements drive information-collection processes and assets.

INFOSYS. “INFOSYS include personnel, machines, manual or automated procedures and systems that allow collection, processing, dissemination and

The news media comprise only a portion of the GIE, but one that can produce strategic-level implications from tactical-level events. Referred to as “the CNN effect,” the dramatic visual presentation of tactical events “can rapidly influence public—and therefore political—opinion so that the political under-pinnings of war and [OOTW] may suddenly change with no prior indication to the commander in the field.”

display of information.”²⁰ INFOSYS cover all links in the chain of actions and procedures that turn information into knowledge which will support the commander’s decision-making process, maintain an accurate view of his battlespace, coordinate operations and shape the MIE. INFOSYS disseminate a highly accurate battlespace RCP, giving leaders greater situational understanding. INFOSYS provide the means to share the RCP throughout the friendly force. “Relevant information drawn from the MIE supports the creation of situational [understanding] that contributes directly to effective C² during all stages of the decision and execution cycle.”²¹

Role of IO in PSO

In PSO, the *enemy* is not one of the warring factions, but the conflict itself. Diplomatic considerations predominate over purely military requirements and impose constraints on the force.²² PSO’s most common characteristic has been the necessity to observe the principles of *legitimacy* and *restraint*. Although US forces conducting PE operations may have to apply lethal combat power during the initial stages—or as the result of acts which violate the terms of the imposed peace—the principles of restraint and legitimacy limit the efficacy of lethal combat power. *Restraint* requires that forces “apply appropriate military capability prudently” with due regard for collateral damage.²³ In peace operations, lethal force is the instrument of last resort. “When force must be used, its purpose is to protect life or compel, not to destroy . . . the conflict, not the belligerent parties, is the enemy . . . the use of force should be a last

resort and, whenever possible, should be used when other means of persuasion are exhausted.”²⁴ Restraint is usually codified in rules of engagement (ROE) that restrict the use of conventional military force.

The focus of PE operations is to compel or persuade the FWF leaders to abide by the terms of the cease-fire, peace agreement, international sanctions or resolutions. IO may be among the most critical and acceptable means of achieving stated objectives within the ROE constraints.²⁵ Army peace operations doctrine recognizes that the “non-violent application of military capabilities, such as civil-military information and [PSYOP] may be more important” to achieving the desired end state.²⁶ Restraining the use of lethal combat power and conducting effective IO can enhance both domestic and international legitimacy perceptions of the peace operation.²⁷

Legitimacy must be the hallmark of all peace operations. Legitimacy is a condition initially derived by the peace settlement and the international legal mandate authorizing the PE force to “keep peace.” Sustaining this legitimacy means sustaining the perception of the legality, morality and correctness of all PSO force actions in the eyes of domestic and world public opinion and of the populace and FWF civil-military leadership. Legitimacy requires impartiality in dealing with the FWF and other actors with interests in the conflict. In PSO, the peace operation force’s impartiality is critical to the operation’s success and legitimacy. The PSO force must demonstrate impartiality in all its dealings with the FWF, showing no favor to either side. Key to sustaining perceptions of impartiality among the FWF is the concept of *transparency of operations*, which allows the FWF to monitor the PSO force’s actions as a confidence- and security-building measure.²⁸ In PE operations, transparency of operations must be balanced against the friendly force’s security and force-protection needs.

Peace operations are carried out under the glare of public scrutiny via the media operating in the GIE. Employing “transparency of operations” serves to amplify this condition. The GIE consists of all organizations and systems outside of the military’s control that process and disseminate information to national and international audiences. The news media comprise only a portion of the GIE, but one that can produce strategic-level implications from tactical-level events. Referred to as “the CNN effect,” the dramatic visual presentation of tactical events “can rapidly influence public—and therefore political—opinion so that the political underpinnings of war and [OOTW] may suddenly change with no prior indication to the commander in the field.”²⁹

The strategic effects resulting from the broadcasting of tactical events via the GIE were clearly seen

in adversary use of television images in the battle of Mogadishu in Somalia during United Nations Operation in Somalia (UNISOM) II, and the thwarted landing of the USS *Harlan County* in support of United Nations Mission in Haiti (UNMIH). In the former case, the televised image of Somalis dragging a dead US soldier through the Mogadishu streets resulted in a strategic change of national policy and US forces withdrew precipitously.³⁰ In the latter case, the televised image of an orchestrated mob on the docks in Port-au-Prince prevented the insertion of US and Canadian forces by ship, leading to their complete withdrawal from the theater of operations.

In PSO, FWF elements and other adversaries opposed to the peace settlement will conduct IO targeted at US forces and US public and world opinion. Avoiding risk, adversaries will posture for the press, attempting to cause reactions through the resulting media reports, aimed at affecting strategic and operational-level PSO force decision making and the international community that supports it.³¹ Adversaries will embellish reporting of actual events or stage incidents for the media to broadcast to the other parties to the dispute, their allies and nations contributing to the PSO force to achieve strategic effects.³² Public perception can put political pressure on nations to modify their participation in the PSO effort. Thus, adversary IO can strike at the strategic level and attempt to fracture the multinational force coalition.³³

Other "actors" are present on the PSO "battlefield" and may intrude into the MIE, causing serious PSO disruption. FWF elements operating in the MIE may consist of more than just their armed forces and may include local police forces, local and regional political and religious groups, terrorists and criminal syndicates.³⁴ Additionally, other international organizations operating outside the MIE, such as the UN, NGOs and PVOs, may conduct independent IO which can affect the PSO force. Effective liaison with nonmilitary supporting organizations can prevent contradictory or nonreinforcing information efforts and present a unified IO effort.

The adversary IO examples previously discussed—Mogadishu, Somalia, and Port-au-Prince, Haiti, demonstrate that technological and military prowess are not requirements for effective IO, especially in MOOTW. Potential adversary IO in MOOTW will seek to integrate all elements of its power and capabilities to target friendly forces. The likely adversaries US forces may face in MOOTW will not be concerned about information superiority. Rather, they will seek only temporary advantages at critical points and times. The likely adversary in MOOTW will see Western concepts of laws of conflict as an unnecessary handicap and will have

US and Croatian soldiers work out a solution to locating and marking minefields.



Mark Milstein, Atlantic News Service

Legitimacy must be the hallmark of all peace operations. Legitimacy is a condition initially derived by the peace settlement and the international legal mandate authorizing the PE force to "keep peace." Sustaining this legitimacy means sustaining the perception of the legality, morality and correctness of all PSO force actions in the eyes of domestic and world public opinion and of the populace and FWF civil-military leadership. Legitimacy requires impartiality in dealing with the FWF and other actors with interests in the conflict.

few qualms or cultural aversions about using deception, trickery, civilian-run enterprise or the media when implementing an IO campaign.³⁵ In MOOTW, friendly forces should expect that adversary IO efforts will include all possible venues and media they can manipulate, to include PSYOP and psychological warfare (PSYWAR) directed at friendly forces and propaganda for domestic consumption; statecraft and public diplomacy used to generate media events that serve IO objectives; censorship of domestic and international media; and misuse of all media to transmit propaganda and PSYOP to all audiences.³⁶ Thuggery, coercion, brutal force and extortion may be employed to ensure the local populace's cooperation and passivity with the agenda of the adversary leadership. Potential MOOTW adversaries include:

- Paramilitary or police forces overtly or covertly opposed to the presence or objectives of US or friendly military forces.
- Organized military forces who are overtly or covertly opposed to the presence or objectives of US or friendly military forces.
- Political, religious or social factions/groups, inside or outside the theater of operations. If any of these

Through the nonlethal capabilities of IO, SFOR attacked the FWF leaders' legitimacy when they attempted to block the DPA implementation. . . . Through a coordinated information campaign, SFOR could and did target the popular support base of adversary leadership and persuade the general populace to support the peace agreement and SFOR objectives.

groups are overtly or covertly opposed to the presence or objectives of US or friendly military forces on a specific military mission, they may be motivated to actively try to deny, degrade, influence or exploit the friendly C² target set to oppose US/friendly objectives.

Bosnia-Herzegovina

The *Dayton Peace Accord (DPA)* approved by the political leadership of the Federal Republic of Yugoslavia, the Republic of Croatia and the Republic of Bosnia-Herzegovina (BiH) brought about a cessation of hostilities in the Bosnian civil war; directed the FWF to withdraw behind a 2-kilometer zone of separation (ZOS); and authorized international PE operations in the republics of the former Yugoslavia.³⁷ In December 1995, acting under the UN Charter's Chapter VII, the UN Security Council (UNSC) authorized member states to establish a multinational Implementation Force (IFOR) to carry out the *DPA* military provisions.³⁸ NATO was designated as the multinational peace force's controlling authority, which included military forces from both NATO and non-NATO nations.

In Bosnia-Herzegovina, the multinational coalition that comprised IFOR and the stabilization force (SFOR), respectively, initially conducted PE operations to separate the FWF and impose the *DPA*'s military provisions. Although IFOR successfully established the ZOS, and the *DPA*'s military provisions have largely been achieved, the PE component and SFOR remained prepared to apply lethal combat power to compel compliance. Even with the transition to SFOR, the primary purpose of all Bosnian operations remained the continued implementation of *DPA* military provisions involving the Entity Armed Forces (EAF) and maintenance of peace necessary for the diplomatic and economic instruments of power to operate.³⁹ However, with the military provisions largely achieved, the emphasis on SFOR's military operations shifted to facilitating the accomplishment of *DPA*'s civil provisions.

When *OJG* began in December 1995, the US Army's IO doctrine was not yet codified in a single document. However, the IO components were pres-

ent, and IFOR conducted IO daily. During the initial operations in *OJE*, the IO components of C²W, PA and CA were all applied to attain information superiority. PA was used to compel compliance with the *DPA* when the TF commander threatened to release information documenting noncompliance, obtained from ground and aviation ZOS reconnaissance, CA and PSYOP teams and the Joint Military Commission, to the international media.⁴⁰

The first US forces' IO campaign in Bosnia-Herzegovina began to follow the new IO doctrine in October 1996. Then Major General Montgomery C. Meigs, the 1st Infantry Division (Mechanized) [1st ID(M)] incoming commander and Multi-National Division-North (MND-N) commander, coordinated with the US Army's Land Information Warfare Activity (LIWA) at Fort Belvoir, Virginia, to assist in IO campaign development for the MND-N AO.⁴¹ Another unique MND-N information campaign feature was that it supported a multinational division.

To orchestrate the 1st ID(M) IO, LIWA provided officers, civilians and noncommissioned officers to form the Division IO Cell. Doctrinally, the Army forces and land component commander (LCC) are supported by a LIWA Forward Support Team (FST) to form the IO Cell. "When deployed, the LIWA FSTs become an integral part of the command's IO staff. To facilitate planning and execution of IO, LIWA provides IO/C²W operational support to [the LCC] and separate Army commands and Active and Reserve components. . . . LIWA acts as the operational focal point for land IO/C²W by providing operational staff support to . . . land component commands."⁴² The MND-N (TF *Eagle*) was a joint and combined force subordinate to SFOR.

Bosnia-Herzegovina has been a struggle of ideas competing for legitimacy and/or supremacy. On this "battlefield," information is the weapon that is wielded through many forms to include propaganda, PSYOP, PA and CA.⁴³ Although IFOR and SFOR did not face off against an "adversary" in *OJE*, *OJG* or *OJF*, the FWF leadership and populace were occasionally uncooperative and at times bellicose toward both IFOR and SFOR. During *OJG* and *OJF*, IO served as the primary means by which SFOR achieved effects in changing attitudes and reducing the barriers to implementing the *DPA*'s civil aspects. The SFOR Information Campaign Plan was built on these seven pillars:

- Secure environment.
- Demining.
- Economic recovery.
- Displaced persons, refugees and evacuees (DPRE).
- Election results acceptance.
- The role of police in a democracy.

- Arms control.
- Common institutions supported by the *DPA*.⁴⁴

IO support battle command in PSO by helping the commander impose control over the battlespace and shape it to achieve "situational dominance."⁴⁵ Through the nonlethal capabilities of IO, SFOR attacked the FWF leaders' legitimacy when they attempted to block the *DPA* implementation. SFOR IO targeted the adversary leadership's decision-making process and C², giving SFOR "the potential to control the adversary's decision-process tempo and even cause it to collapse."⁴⁶ Through a coordinated information campaign, SFOR could and did target the popular support base of adversary leadership and persuade the general populace to

support the peace agreement and SFOR objectives.⁴⁷

TF *Eagle* often found IO proved to be the most effective nonlethal element the division could employ. During *OJE* and *OJG* in Bosnia, NATO and coalition forces employed IO to know where the FWF were and what they were doing at any given time.⁴⁸ The situational dominance IFOR and SFOR exercised over the FWF was achieved by establishing and maintaining information superiority over the FWF civilian and military leaders and other potential adversaries. The division employed its reconnaissance, intelligence, surveillance, targeting and acquisition (RISTA) assets—supplemented by nontraditional intelligence collectors and HUMINT—to maintain an information advantage over the FWF.⁴⁹ **MR**

NOTES

1. US Army Field Manual (FM) 100-6, *Information Operations* (Washington, DC: Government Printing Office [GPO], 27 August 1996), iv.
2. The term *military operations other than war*, which is used throughout this article has been supplanted in some circles by Support and Stability Operations (SASO). For MOOTW's definition, see Joint Publication 1-02 and the Department of Defense *Dictionary of Military and Associated Terms*, downloaded from <http://www.dtic.mil/doctrine/jel/doddict/>. Additionally, FM 100-6 devotes only three pages to a discussion of the unique considerations for OOTW, a rather broad category of military operations, of which peace operations are merely a subset.
3. LTC Stephen W. Shanahan and LTC Garry J. Beavers, "Information Operations in Bosnia," *Military Review* (November-December 1997), 61.
4. FM 100-6, 2-3.
5. *Ibid.*, 1-4.
6. *Ibid.*, 2-5.
7. *Ibid.*, 3-0.
8. COL Ronald T. Sconyers, US Air Force, "The Information War," *Military Review* (February 1989), 48.
9. FM 33-1, *Psychological Operations* (Washington, DC: GPO, 18 February 1993), 2-2.
10. For an overview of PA missions, see FM 100-6, Figure 3-5 and "Coordination and Support Tasks" on page 3-15.
11. International organizations exerting global or extraregional influence, include the International Committee of the Red Cross and Organization for Security and Cooperation in Europe (OSCE). Nongovernment organizations are transnational organizations of private citizens that maintain a consultative status with the Economic and Social Council of the UN. Private volunteer organizations are typically nonprofit organizations involved in humanitarian efforts. See Office of the Chairman of the Joint Chiefs of Staff, *Joint Force Capabilities*, Joint Publication 3-33, GPO, IV-10.
12. Pamela Brady, "Joint Endeavor—The Role of Civil Affairs," *Joint Force Quarterly* (Summer 1997), 47.
13. Bruce Castka, "The National Support Element in Hungary," *Joint Force Quarterly* (Summer 1997), 48-49. See also, COL Michael D. Slarry and LTC Charles W. Anderson Jr., "FM 100-6: Information Operations," *Military Review* (November-December 1996), 8.
14. COL Brian E. Fredericks, "Information Warfare at the Crossroads," *Joint Force Quarterly* (Summer 1997), 102.
15. FM 100-6, 3-12 and 3-14.
16. FM 41-10, *Civil Affairs Operations* (Washington, DC: GPO, 11 January 1993), 6-2 and 6-3.
17. FM 100-6, 4-0.
18. *Ibid.*, 4-3.
19. *Ibid.*, 4-1.
20. *Ibid.*, 5-0.
21. *Ibid.*, 4-1.
22. FM 100-7, *Decisive Force: The Army in Theater Operations* (Washington, DC: GPO, 31 May 1995), 8-14.
23. FM 100-23, *Peace Operations* (Washington, DC: GPO, 30 December 1994), 17.
24. *Ibid.*, v and 17.
25. FM 100-6, 6-17.
26. FM 100-23, v.
27. *Ibid.*, 18.

28. *Ibid.*, 16.
29. FM 100-5, *Operations* (Washington, DC: GPO, 14 June 1993), 1-3.
30. Frank J. Stech, "Winning CNN Wars," *Parameters* (Autumn 1994), 38.
31. US Army Training and Doctrine Command (TRADOC) Pamphlet 525-69, *Concept for Information Operations* (Fort Monroe, VA: GPO, 1 August 1995), 5.
32. Office of the Chairman of the Joint Chiefs of Staff, *Joint Publication 3-07.3, Joint Tactics, Techniques and Procedures for Peacekeeping Operations* (Washington, DC: GPO, 29 April 1994), VII-8.
33. FM 100-8, *The Army in Multinational Operations* (Washington, DC: GPO, 24 November 1997), 2-18.
34. FM 100-6, 1-3. See FM 100-23, v and 83-85 for a partial list of IOs, NGOs and PVOs relevant to peace operations.
35. MAJ Erin Gallogly-Staver and MAJ Raymond S. Hilliard, "Information Warfare: Opposing Force [OPFOR] Doctrine—An Integrated Approach," *News From the Front!* Center for Army Lessons Learned (CALL), Fort Leavenworth, KS (September-October 1997), 12-18.
36. Psychological warfare (PSYWAR) is the planned use of propaganda and other psychological actions having the primary purpose of influencing the opinions, emotions, attitudes and behavior of hostile foreign groups in such a way as to support the achievement of national objectives. See also Joint Publication 1-02, *DOD Dictionary of Military and Related Terms*, as amended 15 April 1998, 349 and 350.
37. The official name of the Dayton Peace Accord is the *General Framework on the Agreement for Peace, or GFAP*.
38. FM 100-23, 15, states that resolutions approved by a competent authorizing entity such as the UN Security Council expresses the political objective and international support and defines the desired end state for peace operations.
39. The Entity Armed Forces (EAF) are composed of the military forces and specialist police units of the two "entities" of Bosnia-Herzegovina: the Bosnian-Croat Federation and Bosnian Serb Republic (Republika Srpska). The Bosnian-Croat Federation includes the Croatian Home Defense Council forces and Bosnian army. The term "former warring faction" (FWF) refers to the three entities of Bosnians (Muslims), Serbs and Croats.
40. CALL, *Initial Impressions Report—Operation Joint Endeavor—Task Force Eagle Initial Operations* (May 1996), 58.
41. LTC Stephen W. Shanahan and LTC Garry J. Beavers, "Information Operations in Bosnia," *Military Review* (November-December 1997), 53.
42. FM 100-6, B-3.
43. COL Ronald T. Sconyers identified the "war of information" as comprising "the true battle area" in MOOTW in "The Information War," *Military Review* (February 1989), 44-52.
44. CALL, *Initial Impressions Report*, April 1998, A-18.
45. FM 34-1, *Intelligence and Electronic Warfare Operations* (Washington, DC: GPO, 27 September 1994), 7-3.
46. MG David L. Grange and COL James A. Kelley, "Information Operations for the Ground Commander," *Military Review* (March-April 1997), 9.
47. LTC Dennis M. Murphy, "Information Operations on the Nontraditional Battlefield," *Military Review* (November-December 1996), 16.
48. MG David L. Grange and LTC James A. Kelley, "Victory Through Information Dominance," *ARMY* (March 1997), 32.
49. The term RISTA is used here deliberately, as opposed to the new term intelligence, surveillance, and reconnaissance (ISR), because the new term does not emphasize the target acquisition systems that support RII development.

Major Arthur N. Tulak is chief, Actual Operations Branch, Center for Army Lessons Learned (CALL), Fort Leavenworth, Kansas. He received a B.A. from the University of Southern California and an M.S. from Southwest Missouri State University and is a graduate of the US Army Command and General Staff College. He has served in a variety of command and staff positions in the Continental United States (CONUS), with the 8th Infantry Division in Germany and the 7th Infantry Division, Fort Ord, California. His experience in information operations (IO) includes CALL deployments to Operations Joint Guard and Joint Forge in Bosnia, where he documented the application of IO in peace enforcement operations.

Major James E. Hutton is a CALL military analyst at Fort Leavenworth. He received a B.S. from Oklahoma State University and an M.A. from Webster University. He has served in a variety of command and staff positions in CONUS and Germany, including chief of plans and operations, G3, National Training Center (NTC), Fort Irwin, California; deputy public affairs officer, NTC; assistant S4, 41st Field Artillery (FA) Brigade, V Corps, Babenhausen, Germany; S1, battalion maintenance officer and battalion operations officer, 4th Battalion, 27th FA Regiment, Babenhausen; and commander, HHS Battery, 4th Battalion, 27th FA Regiment, Babenhausen.